



SN 09/590,884

PATENTIN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Erika Hawkins et al.	Examiner:	R. Gitomer
Serial No.:	09/590,884	Group Art Unit:	1627
Filed:	June 09, 2000	Docket:	341.014US1
Title:	METHOD FOR INCREASING LUMINESCENCE ASSAY SENSITIVITY		

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Mail Stop Appeal Brief - Patents
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Sir:

In compliance with 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 *et. seq.*, the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicants respectfully request that this Supplemental Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to MPEP 609, Applicants request that a copy of the Form 1449, initialed as being considered by the Examiner, be returned to the Applicants with the next official communication.

Pursuant to 37 C.F.R. § 1.97(c)(2), Please charge Deposit Account No. 19-0743 in the amount of \$180.00 as set forth in 37 C.F.R. § 1.17(p). Please charge any additional fees or credit any overpayment to Deposit Account No. 19-0743. The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this communication.

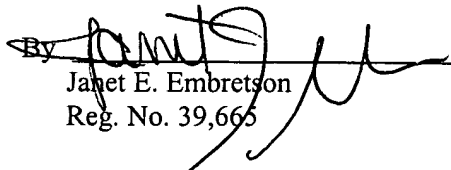
Respectfully submitted,
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Date

April 22, 2005

By


Janet E. Embretson
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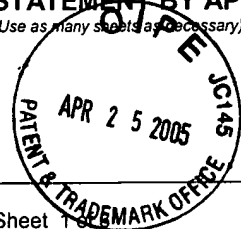
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Application Number	09/590,884
Filing Date	June 9, 2000
First Named Inventor	Hawkins, Erika
Group Art Unit	1623
Examiner Name	Gitomer, Ralph

Attorney Docket No: 341.014US1

US PATENT DOCUMENTS

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document
	2001/0006820	07/05/2001	Knapp et al.
	2004/0096924	05/20/2004	Hawkins et al.
	2004/0224377	11/11/2004	Hawkins et al.
	4,235,961	11/25/1980	Lundin
	4,246,340	01/20/1981	Lundin et al.
	4,390,274	06/28/1983	Berthold et al.
	5,618,682	04/08/1997	Scheirer
	6,200,762	03/13/2001	Zlokarnik et al.
	6,221,612	04/24/2001	Knapp et al.
	6,602,657	08/05/2003	Bronstein et al.
	6,602,658	08/05/2003	Bronstein et al.

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	T ²
	EP 0 247 796	12/02/1987		
	EP 0 054 675	06/30/1982		Abstract
	EP 1 081 495	03/07/2001		
	EP 0 342 024	11/15/1989		
	EP 0 610 937	08/17/1994		
	JP 07-67696	03/14/1995		Yes
	WO 92/04468	03/19/1992		

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	ARMSTRONG et al., "Selectivity of Crown Ether (and Related) Ionophores for Small Metal Cations". Presented at the Spring, 2000 CONFCHEM, an on-line conference, April 3 - May 5, 2000.
	BLAISE et al., "A bacterial toxicity assay performed with microplates, microluminometry and Microtox reagent", <u>BioTechniques</u> , 16(5), 932-937 (1994).
	BRANCHINI et al., "Naphtyl- and Quinolyl-luciferin: Green and Red Light Emitting Firefly Luciferin Analogues", <u>Photochemistry and Photobiology</u> , 49(5), 689-695 (1989).
	BRONSTEIN et al., "Chemiluminescent and bioluminescent reporter gene assays", <u>Analytical Biochemistry</u> , 219(2), 169-181 (1994).
	BRONSTEIN et al., "Novel Chemiluminescent Adamantyl 1,2-Dioxetane Enzyme Substrates", In: <u>Bioluminescence & Chemiluminescence: Current Status</u> , Chichester ; New York : Wiley, eds. PE Stanley and LJ Kricka, Proceedings of the VIth International Symposium on Bioluminescence and Chemiluminescence, Cambridge, September 1990, 73-82 (1991).
	DELUCA et al., "Role of Sulfhydryl Groups in Firefly Luciferase", <u>Biochemistry</u> , 3, 935-939 (1964).

EXAMINER

DATE CONSIDERED

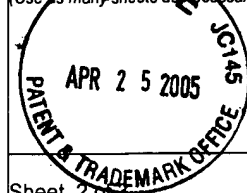
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Application Number	09/590,884
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Examiner Name	Gitomer, Ralph

Attorney Docket No: 341.014US1

	DELUCA et al., "The Hydrolase Properties of Firefly Luciferase", <u>Biochemical and Biophysical Research Communications</u> , 18, 836-842 (1965).
	DELUCA et al., "The Role of 1,N ⁶ -Ethenoadenosine Triphosphate and 1, N ⁶ - Ethenoadenosine Monophosphate in Firefly Luminescence", <u>PNAS</u> , 70, 1664-1666 (1973).
	DENBURG et al., "Anion inhibition of firefly luciferase", <u>Archives of Biochemistry & Biophysics</u> , 141, 668-675 (1970).
	DENBURG et al., "Substrate-binding properties of firefly luciferase. I. Luciferin-binding site.", <u>Archives of Biochemistry & Biophysics</u> , 134, 381-394 (1969).
	FORD et al., "Enhancement of Firefly Luciferase Activity by Cytidine Nucleotides", <u>Analytical Biochemistry</u> , 204, 283-291 (1992).
	HASTINGS, "Biological Diversity, Chemical Mechanisms, and the Evolutionary Origins of Bioluminescent Systems", <u>Journal of Molecular Evolution</u> , 19, 309-321 (1983).
	KOBATAKE et al., "Bioluminescent immunoassay with a protein A-luciferase fusion protein", <u>Analytical Biochemistry</u> , 208(2), 300-305 (1993).
	LECKIE et al., "Normalization of GUS by luciferase activity from the same cell extract reduces transformation variability.", <u>Biotechniques</u> , 17, 52-53, 56-57 (1994).
	MATTHEWS, "Purification and properties of Renilla reniformis luciferase.", <u>Biochemistry</u> , 16(1), 85-91 (1977).
	MCELROY et al., "Function of Adenosine Triphosphate in the Activation of Luciferin", <u>Archives of Biochemistry and Biophysics</u> , 64, 257-271 (1956).
	MCELROY et al., "Mechanisms of Bioluminescent Reactions", In: <u>A Symposium on Light and Life</u> , Edited by W. D. McElroy and B. Glass, John Hopkins Press, 219-257 (1961).
	MOYER et al., "Nucleoside Triphosphate Specificity of Firefly Luciferase", <u>Analytical Biochemistry</u> , 131, 187-189 (1983).
	RHODES et al., "The Synthesis and Function of Luciferyl-adenylate and Oxyluciferyl-adenylate", <u>J. Biol. Chem.</u> , 233, 1528-1537 (1958).
	ROSENDAHL et al., "Dimensional Probing of the ATP Binding Site on Firefly Luciferase", <u>Photochemistry and Photobiology</u> , 35, 857-861 (1982).
	SCHAAP et al., "Chemiluminescent substrates for alkaline phosphatase: application to ultrasensitive enzyme-linked immunoassays and DNA probes.", <u>Clinical Chemistry</u> , 35, 1863-1864 (1989).
	SCHRAM, "Evolution of Bioluminescent ATP Assays", In: <u>Bioluminescence and chemiluminescence : current status</u> , Chichester ; New York : Wiley, eds. P E Stanley; Larry J Kricka, Proceedings of the VIth International Symposium on Bioluminescence and Chemiluminescence, Cambridge, September 1990, 407-412 (1991).
	SELIGER et al., "The Colors of Firefly Bioluminescence: Enzyme Configuration and Species Specificity", <u>PNAS</u> , 52, 75-80 (1964).
	THOMPSON et al., "Modulation of firefly luciferase stability and impact on studies of gene regulation.", <u>Gene</u> , 103, 171-177 (1991).
	THORPE et al., "Enhanced chemiluminescent reactions catalyzed by horseradish peroxidase", <u>Methods in Enzymology</u> , 133, 331-353 (1986).
	WARD, "Chemi-and Bioluminescence (ed. John Burr) Marcel Dekker, Inc., New York", <u>New York: M. Dekker</u> , 321-358 (1985)

EXAMINER

DATE CONSIDERED

Substitute Disclosure Statement Form (PTO-1449)

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Sheet 3 of 3

WOOD, "Marker proteins for gene expression", Current Opinion in Biotechnology, 6, 50-58 (1995).WOOD et al., "Recent advances and prospects for use of beetle luciferases as genetic reporters", In: Bioluminescence & Chemiluminescence: Current Status, Chichester ; New York : Wiley, eds. Stanley, PE and Kricka, J, Proceedings of the VIth International Symposium on Bioluminescence and Chemiluminescence, Cambridge, September 1990, 543-46 (1991).

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